

Michael Wolford AFCENT Environmental Program Manager Portage, Inc.

michael.wolford.ctr@shaw.af.mil

DSN: 965-8848; Comm: 803-895-8848

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Information	regarding this burden estimate or mation Operations and Reports	or any other aspect of the 1215 Jefferson Davis	is collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE JUN 2010		2. REPORT TYPE		3. DATES COVE 00-00-2010	red <b>) to 00-00-2010</b>	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
Developing/Maintaining an Environmental Program in Contingency				5b. GRANT NUMBER		
Operation				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Portage, Inc,1075 S. Utah Ave., Suite 200,Idaho Falls,ID,83402				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAII Approved for publ	LABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NOTES						
Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition						
held 14-17 June 2010 in Denver, CO. U.S. Government or Federal Rights License						
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	14	RESI UNSIDLE FERSUN	

**Report Documentation Page** 

Form Approved OMB No. 0704-0188

# Agenda

Background

Plan/Policies

Tools

Afghan Program Components

# Background

- Afghanistan Deployment
  - Planning began in June 08
  - Significant Challenges
- Policies
  - Working off draft SOP
  - USFOR-A
  - CENTCOM Reg 200-2
- Personnel = 1

- Waste
  - Solid Waste
  - Wastewater
  - Medical Waste
  - Hazardous Waste
- P2
  - 80% of HW stream was used oil/antifreeze/batteries
  - No technology to reduce and reuse these waste streams



## Plan

#### Assess what's there

- Staff
- Equipment
- Management Tools

### Determine priorities/objectives

- Prioritize Bases
- Staff
- Policy/SOP
- Solid Waste
- Wastewater
- P2 Initiatives

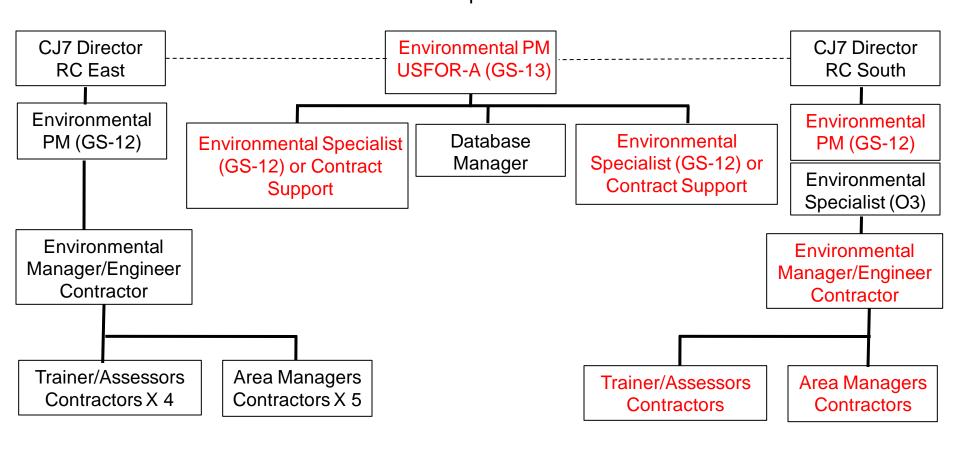
### Develop controls/management tools

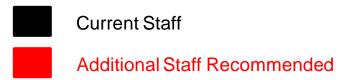
- Tracking
- Database
- Theater Provided Equipment Property Book

# Afghanistan Program Components

- Policy/SOP
- Staffing
- Controls/Management Tools
- TPE
- Solid Waste
- Hazardous Waste (to include Medical Waste)
- Wastewater
- Database
- Pollution Prevention

## Staffing Sep 09





## Solid Waste

**Sep 09** 

### **Accomplished:**

- Power Surety TF looking at waste to energy add-ons for incinerators
- 1 SW incinerator operational 36 mobile,
   30 small, 3 Munson; all funded
- 18 MILCON projects submitted/designed for larger FOBs

- Camp Configuration
- Camp Location
- Capacity (population)
- Fuel (delivery and use)
- Deployable, simple, and scalable



## Hazardous/Medical Waste

**Sep 09** 

### **Accomplished:**

- DRMO manages contracts to move waste twice/ year through Pakistan to Europe
- Petroleum contaminate soil \$740 per 55 gallon drum
- 80% of the waste stream is used oil, lead-acid batteries, and antifreeze
- Med Incinerators sufficient at this time

- Land Farm (requires real estate)
- Recycling (requires market)
- Reuse (used oil as fuel)





## Wastewater

**Sep 09** 

### **Accomplished:**

- Most sites have inadequate treatment systems
  - UXO/Mines limit usable land in AFG
  - Use local companies to truck sewage off site –fate of material unknown
- JARB Packets complete for 8 package plants

- Contract language
- Know where the waste will go and how it is treated
- Inspect sites
- Deployable, simple, scalable wastewater systems





## Pollution Prevention

**Sep 09** 

#### **Accomplished:**

- Oil Cat 25 in theater
- Antifreeze Recyclers 17 in theater
- Electric cars 4 used for test

- Land farming for enduring camps or portable desorption units for thermal treatment; requires land/planning
  - Pollution prevention programs work well and save money
  - Antifreeze recycling, fuel/oil blending, battery recovery systems are simple solutions







## Database

**Sep 09** 

## **Accomplished:**

- Database has been completed and stored on the CJTF SIPR site;
   working with AKO-S to hang database there
- All reports regarding environmental issues, training records, and environmental contacts are submitted to the database manager
- Started tracking burn pit locations(open and closed)

- Simple system
- ISIP is a good idea, but needs to be faster
- Report "up" often to maintain data (back up)
- Conduct detailed turn over

# Summary

Sep 09

### **Accomplished:**

- Environmental SOPs/guidance documents/regulations
- Staffing needs met in RC East
- Training program; developed and transmitted to FORSCOM.
- 69 solid waste incinerators funded and contract awarded
- 14 medical waste incinerators; 5 operational; 9 need installed
- 18 MILCON Projects for waste management complexes
- Pollution prevention continues to be pushed
- Electric Vehicle proof of concept approved
- Eight wastewater package plants
- Database complete

# Summary

### **Way Ahead:**

- Environmental staff needed for every deployment; need to determine what "right" looks like
- Implement training program; require environmental officers be identified/assigned at all camps and trained prior to deployment
- Look at the possibility of HAZMARTS to reduce the amount of hazardous wastes generated; look at other P2 processes and equipment
- Wastewater requirements need to be identified early with the mindset that expansion will occur; deployable, simple, and scalable systems
- Consider electric vehicles as normal practice for on-base use during all deployments

# **Questions**